

REMARKS

Claims 1-64 are pending in the application prior to entering this amendment. The applicants have previously withdrawn, and now cancel, claims 6-37 and 42-64.

The examiner rejects claims 1-5 and 38-41 under 35 U.S.C. 102(e) as being anticipated by Florencio et al (U.S. Patent No. 6,226,041).

The applicants amend claims 1, 38, and 39 and cancel claims 6-37 and 42-64 without prejudice.

The applicants add new claims 65-69.

The application remains with claims 1-5, 38-41, and 65-69 after entering this amendment.

The applicants add no new matter and request reconsideration.

Claim Rejections Under § 102(e)

The examiner rejects claims 1-5 and 38-41 as old over Florencio. The applicants traverse the rejections for the reasons that follow.

The present application describes a circuit and method for modifying a region of an encoded image. In one embodiment, a television receiver system 130 includes a remote control 132 and an HDTV receiver/display 134. A set top box 136 receives an encoded, multiplexed broadcast video signal at a processing circuit 138. The video signal includes one or more broadcast channels and one or more overlay frames such as frames that making up an electronic program guide (EPG). A channel selector 142 demultiplexes the video signal and provides a video channel signal to a decoder 144 responsive to a command decoder 140, in turn responsive to the remote control 132. When the viewer wishes to display an overlay frame, e.g., the EPG, he activates the appropriate buttons on the remote control 132. The command decoder 140 provides an overlay command to the decoder 144 responsive to the user's button activation on the remote control 132. The decoder 144 decodes the overlay frames and the appropriate overlay frame regions. The decoder 144 may decode the overlay frames and the overlay frame regions down to a transform or pixel domain. The decoder 144 does not decode the frame regions that will not be blended with the overlay frames. A region converter 147 blends or combines the overlay frames with the overlay frame regions. An encoder 148 re-encodes the blended overlay frames and overlay frame regions.

In contrast, Florencio discloses a system that allows local broadcasters to insert logos and other imagery into only disposable frames of a video signal. Florencio selects a logo and

a location within the video signal for its insertion (202), identifies blocks and macroblocks affected by the logo (204), and extracts corresponding data from only B frames (206). Florencio generates corresponding logo-inserted data and inserts it into the bitstream in place of the original data (208). In Florencio, the local broadcaster selects the logo and its location in the video signal (202).

Claim 1 recites a processor operable to *receive a signal including an overlay frame and an encoded image having first and second regions*. Claim 38 recites *receiving a video signal including an encoded image and an overlay frame*. The examiner alleges Florencio's video logo inserter 108 (Figure 1) and step 202 (Figure 2) disclose the recited processor receiving operation. But in Florencio, a special processor 104 includes a decoder 106 that decodes a compressed bitstream (received from the encoder 102) to generate a decoded video stream that it provides to a logo inserter 108. The processor 104, therefore, receives a compressed digital bitstream devoid of a logo. The logo inserter 108 fares no better in anticipating the recited receiving operation since it receives decoded video—not the recited *encoded image*—that is also devoid of a logo (disclosing the recited *overlay frame*). Put differently, Florencio's logo inserter 108 generates the logo that is to be inserted in the decoded video signal. The logo is not included with the bitstream generated by the encoder 102 (or the decoded video generated by the decoder 106) but is rather generated by the logo inserter 108.

Claim 1 recites *decode the first region and the overlay frame*. Claim 38 recites *decoding the overlay frame*. The recitation makes crystal the distinction between Florencio and the present claims. The processor decodes both the first region and the overlay frame since both are included in the signal received by the processor. Nothing in Florencio suggests that its logo inserter 108 decodes the logo it creates and inserts into the decoded video. Since the logo inserter 108 creates the logo, it would appear unnecessary to decode it as part of another signal.

Claim 38 recites *in response to an overlay command, modifying the decoded first region to include the decoded overlay frame*. Florencio does not disclose the recited overlay command (and the examiner likewise fails to identify it).

New claim 65 and 68 recite storing the re-encoded modified first region and the second (un-decoded) region. And new claim 66 discloses a buffer. Florencio discloses no such storing or buffer.

New claim 67 recites that the processor decodes the first region of the image by identifying motion vectors. Florencio discloses no such motion vector identification.

New claim 69 recites re-encoding the modified first region responsive to controlling quantization degree. By doing so, the buffer is prevented from overflowing. Florencio discloses no such control.

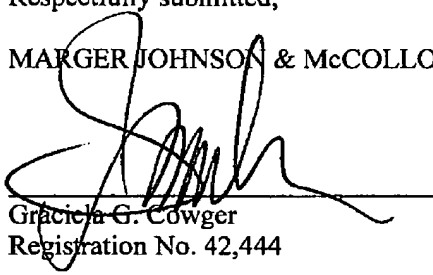
CONCLUSION

The applicants request reconsideration and allowance of all remaining claims. The applicants encourage the Examiner to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

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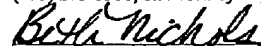
Respectfully submitted,

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